

# Notice of Allowability

Application No.

10/631,086

Examiner

Thinh T Nguyen

Applicant(s)

YOKOGAWA ET AL.

Art Unit

2818

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/22/2004.
2. ☒ The allowed claim(s) is/are 21-27.
3. ☒ The drawings filed on 31 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/989,270.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
David Nelms  
Supervisory Patent Examiner  
Technology Center 2800

## **DETAILED ACTION**

### **Examiner's Amendment.**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Since Applicants withdraw claims 1-12 from consideration, claims 1-12 are cancelled.

### **Reason for allowance**

2. Claims 21-27 are allowed. The following is an examiner's statement of reason for allowance:

A/ Applicants' filing of The Terminal Disclaimer has overcome the double patenting rejection of claim 21-27.

#### **B/ I/ Group I: Claims 21-25.**

Claims 21-25 are allowed because the prior fails to teach the limitations:

-- " wherein a part interposed between the source/drain regions in the active region is composed by alternately stacking a plurality of first semiconductor layers and a

plurality of second semiconductor layers, which contain an impurity for carriers at a high concentration and which film thickness are smaller than the film thickness of the plurality of first semiconductor layers, wherein the plurality of first semiconductor layers and the plurality of second semiconductor layers are made of the same material "--

and all other limitations as recited in claim 21.

**II/ Group II: Claims 26-27.**

Claims 26-27 are allowed because the prior fails to teach the limitations:

-- "wherein a part interposed between the second source/drain regions in the second active region is composed by alternately stacking a plurality of third semiconductor layers and a plurality of fourth semiconductor layers, which contain an impurity for carriers at a high concentration and which film thickness are smaller than the film thickness of the plurality of third semiconductor layers, wherein the plurality of third semiconductor layers and the plurality of fourth semiconductor layers are made of the same material, and wherein each of the plurality of third semiconductor layers has equal thickness, and each of the plurality of fourth semiconductor layers has equal thickness. "--

and all other limitations as recited in claim 26.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

### Conclusion


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thinh T Nguyen whose telephone number is 571-272-1790. The examiner can normally be reached on Monday-Friday 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached at 571-272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Thinh T Nguyen 

Art unit 2818

  
David Nelms  
Supervisory Patent Examiner  
Technology Center 2800